



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,224		11/28/2001	Martti Kesaniemi	0149US-Oplayo	2775
23521	7590	06/28/2004		EXAMINER	
		OVATIONS	SENFI, BEHROOZ M		
30 FERN L. SOUTH PO		O, ME 04106		ART UNIT	PAPER NUMBER
50011110		, <u> </u>		2613	
				DATE MAILED: 06/28/2004	. 1

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/996,224	KESANIEMI, MARTTI
Office Action Summary	Examiner	Art Unit
	Behrooz Senfi	2613
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with t	he correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply within the statutory minimum of thirty (30 rill apply and will expire SIX (6) MONTHS cause the application to become ABANE	be timely filed)) days will be considered timely. from the mailing date of this communication. DONED (35 U.S.C. § 133).
Status		
 1) Responsive to communication(s) filed on 28 No. 2a) This action is FINAL. 2b) This 3) Since this application is in condition for allower closed in accordance with the practice under E. 	action is non-final. ice except for formal matters	
Disposition of Claims		
4) Claim(s) <u>1-43</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) <u>1-43</u> is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or		
9) The specification is objected to by the Examiner10) The drawing(s) filed on is/are: a) access		he Evaminer
Applicant may not request that any objection to the o		
Replacement drawing sheet(s) including the correcti		
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Of	fice Action or form PTO-152.
Priority under 35 U.S.C. § 119	• .	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Appliity documents have been received in Appliity documents have been received.	cation No eived in this National Stage
Attachment(s)		
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5.6</u> .	4) Interview Summer Paper No(s)/Ma 5) Notice of Inform 6) Other:	

Application/Control Number: 09/996,224

Alt Unit: 2613

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Conklin (US 6,735,338).

Regarding claims 1, 40 Conklin '338 discloses "method for interpolating an image between a first and a second image" (i.e. abstract, col. 12, lines 36 - 40), and "forming a vector field composed of a number of motion vectors between the first and second image" (i.e. figs. 3 and 16), and "forming an intermediate image by using the vector field to interpolate values of the associated parameters of the motion vectors and calculating distortion between the formed intermediate image" (i.e. figs. 4 - 6, frame analysis), and "if the distortion is not acceptable, calculating new parameter values" reads on (figs. 4 - 6, frame analysis, and thresholding and error checking routines).

Regarding claims 2-4, Conklin '338 discloses, "motion vector represent color and motion information, and interpolation is made for at least one part of the image" (i.e. col. 1, lines 50-65, col. 3, lines 10-16).

Application/Control Number: 09/996,224

Art Unit: 2613

Regarding claims 5-7, Conklin '338 discloses, "wherein when forming the intermediate image, values of adjusting parameter are taken into account" (i.e. col. 13, lines 25+).

Regarding claims 8 - 9, 11 - 16, Conklin '338 discloses, "distortion is a sum of error between the formed intermediate image and the image which is desired to be formed" (i.e. figs. 4 and 7, col. 10, lines 64 - col. 11, lines 10).

Regarding claims 10, 17, 18 and 19, the limitations claimed are substantially similar to claim 1, therefore the ground for rejecting claim 1 also applies here.

Regarding claims 20 – 23, Conklin '338 discloses, "calculation of associated parameter values" reads on (fig. 6, col. 8, lines 19 – 24 and col. 9, lines 10 – 15).

Regarding claims 24 - 27, Conklin '338 discloses, "more than one intermediate image is interpolated" (i.e. abstract, lines 1 - 5).

Regarding claims 28 – 33 and 34 - 35, Conklin '338 discloses, "encoder and decoder" (i.e. figs. 1, 3 and 9).

Regarding claims 36 – 39, Conklin '338 discloses, "singular motion vector" (i.e. fig. 3).

Regarding claims 41 - 43, the limitations claimed are substantially similar to claim 1, therefore the ground for rejecting claim 1 also applies here.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is (703)305-0132.

Application/Control Number: 09/996,224

Art Unit: 2613

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B. J.

6/17/2004

GIMS PHILIPPE GIMS PHILIPPE BRIMARY EXAMINER